

LETTER REPORT
FOR
ACID SPILL SITE
a.k.a. WELTMEYER ACID SPILL SITE
HARVEY, COOK COUNTY, ILLINOIS
TDD: S05-9710-010
PAN: 7C1001SIXX



LETTER REPORT
FOR
ACID SPILL SITE
a.k.a. WELTMEYER ACID SPILL SITE
HARVEY, COOK COUNTY, ILLINOIS
TDD: S05-9710-010
PAN: 7C1001SIXX

February 4, 1998

Prepared for:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Emergency and Enforcement Response Branch
77 West Jackson Boulevard
Chicago, Illinois 60604

Prepared by:	Steve Skare, START Project Manager	Date:	2/4/98
Reviewed by:	Mary Jane Ripp, START Assistant Program Manager	Date:	2/4/98
Approved by:		Date:	2/4/95



S. S. S. S. S.

-cology and environment, inc.

International Specialists in the Environment

33 North Dearborn Street, Chicago, Illinois 60602 Tel. 312/578-9243, Fax: 312/578-9345



ecology and environment, inc.

International Specialists in the Environment

33 North Dearborn Street Chicago, Illinois 60602

Tel. 312/578-9243, Fax: 312/578-9345

February 4, 1998

Ms. Gail Nabasny, Project Officer **Emergency Support Section** U.S. Environmental Protection Agency 77 West Jackson Boulevard Chicago, IL 60604

Re:

Acid Spill Site

a.k.a. Weltmeyer Acid Spill Site Harvey, Cook County, Illinois

TDD: S05-9710-010 PAN: 7C1001SIXX

Dear Ms. Nabasny:

The United States Environmental Protection Agency (U.S. EPA) tasked the Ecology and Environment, Inc. (E & E), Superfund Technical Assessment and Response Team (START), under Technical Direction Document (TDD) S05-9710-010, to provide support for an emergency response at the Acid Spill site. The site is an inactive truck and automotive repair shop located at 14752 Spaulding Avenue in Harvey, Cook County, Illinois (Attachment A, Figure 1). The site is located in a mixed residential and industrial area and consists of a garage complex, four tankers, and two storage trailers (Attachment A, Figure 2).

On October 22, 1997, an acid spill from a tanker located on the eastern side of the property was reported to the Illino's Environmental Protection Agency (IEPA). The tanker was apparently being salvaged for scrap metal and drain holes were cut into the tanker to drain the acid.

On October 23, 1997, emergency responders from IEPA, U.S. EPA, and START responded to the incident and met with officials from the Harvey Fire and Police Departments. An initial site reconnaissance performed by START, U.S.EPA On-Scene Coordinator (OSC) Kevin Turner, and IEPA representative Ed Osowski found the site to be overgrown with vegetation and in disrepair, with easy access to the public. The acid apparently had pooled on the ground, reacted with the underlying soil, and flowed downgradient under a neighboring storage trailer.

START conducted initial air monitoring of the spill area, the tankers, and inside the building. Results of the air monitoring indicated no levels above background for volatile organic gases, explosive gases, oxygen, carbon monoxide, or hydrogen sulfide.

Samples were collected from three of the four tankers, soil from the spill area, and from two drums and one storage bag located inside the garage complex. Samples T-01, T-03, and T-04 were collected from Tankers #1, #3, and #4, respectively. Sample S-01 was collected from soil east of

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Tanker #3. Sample S-02 was collected from a bag inside the east bay of the garage area. Samples S-03 and D-01 were collected from drums inside the west bay of the garage area.

All the samples were analyzed for pH and total metals. In addition, the drum samples were analyzed for total volatile organic compounds and flash point. All samples were delivered to National Environmental Testing, Inc., in Bartlett, Illinois. Analytical results of the pH tests indicate levels of 1.65, 1.83, and 1.72 standard units in the three tanker samples. These results classify the samples as Resource Conservation and Recovery Act (RCRA) hazardous wastes. The sample results also indicated that the liquids in the tankers, the soil from the spill area, the contents of the storage bag, and one of the drums were acids. The remaining drum sample was considered to be flammable. All materials sampled posed a threat to human health and the environment.

On October 24, 1997, the U.S. EPA's Emergency Response Cleanup Services (ERCS) contractor mobilized to the Acid Spill site to initiate the removal of the hazardous wastes found on site. A uniloader was used to excavate the top 4 inches of contaminated soil from the spill area. The contaminated soil was placed in a rolloff box with other debris for disposal. All waste containers, including drums, bags, and small cans, were inventoried and consolidated inside a room in the garage complex. A total of four tanker trucks from Heritage Environmental were used to remove approximately 12,000 gallons of acid from the four tankers. An acid sludge remained in the bottom of the tankers after the liquid was removed. The sludge was placed into 55-gallon polyethylene drums for disposal. A total of 60 drums of acid sludge were containerized. When all wastes were removed from the tankers, the tankers were cut, up using a shears attachment on a excavator, into 6 by 8 feet pieces. The scrap metal was placed into three 20-cubic-yard rolloff boxes for disposal. The bags of green solid inside the garage complex were placed into four 1-cubic-yard boxes for disposal. The sampled drums from the garage complex were placed in overpacks for disposal.

All site work was completed on November 17, 1997. The site was secured and all personnel departed site.

This Letter Report completes the requirements of this TDD. If you have any questions or require additional information, please contact our office at (312) 578-9243.

Sincerely,

Steve Skare

START Project Manager

Thomas Kouris

START Program Manager

Attachments:

A - FiguresB - PhotodocumentationC - Validated Analytical ResultsD - Waste Disposal Table

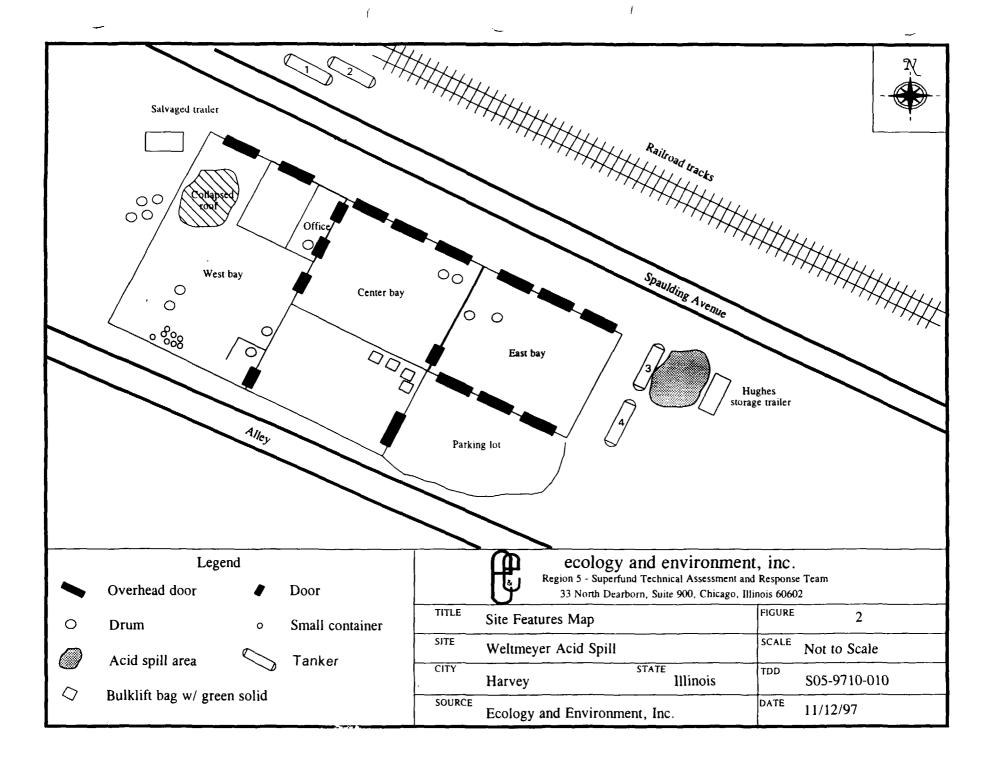
Fred Bartman, U.S. EPA OSC START TDD File cc:

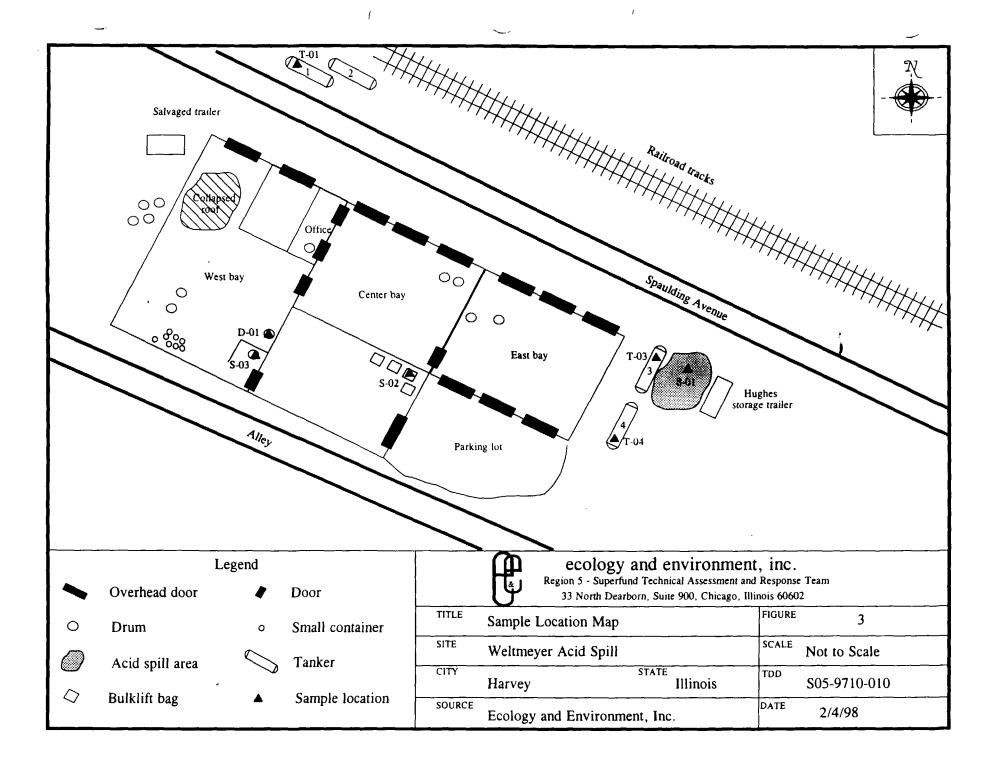
}

Attachment A

Figures

Map redacted due to geological and geophysical information





Attachment B

Photodocumentation

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SITE: Weltmeyer Acid Spill LOCATION: Harvey, IL

SUBJECT: Location of sample S-01.

DATE: October 23, 1997

DIRECTION: Down

TIME: 1316 Hours

PHOTOGRAPHER: S. Skare

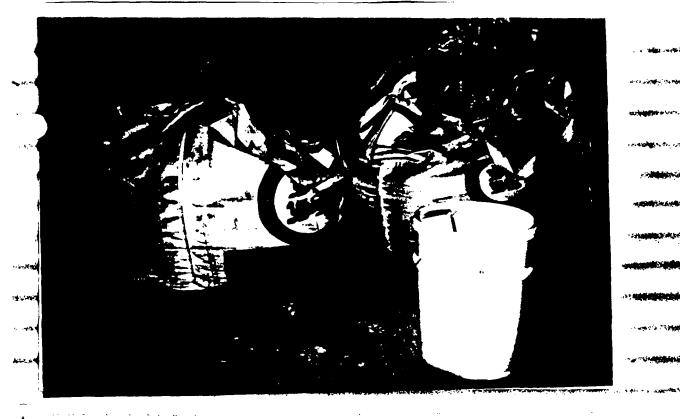


SITE: Weltmeyer Acid Spill LOCATION: Harvey, IL

DATE: October 23, 1997 DIRECTION: South

SUBJECT: Tanker spill area where sample S-01 was taken.

TIME: 1317 Hours



SITE: Weltmeyer Acid Spill LOCATION: Harvey, IL

DATE: October, 23, 1997 DIRECTION: North

SUBJECT: Bags of green solid collected as sample S-02.

TIME: 1326 Hours

PHOTOGRAPHER: S. Skare



SITE: Weltmeyer Acid Spill

DATE: October 23, 1997 DIRECTION: East

LOCATION: Harvey, IL DIRECTION: East SUBJECT: View of "SHERWIN WILLIAMS" paint label on drum S-03.

TIME: 1350 Hours

PHOTOGRAPHER: S. Skare



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SITE: Weltmeyer Acid Spill LOCATION: Harvey, IL

DATE: October 23, 1997 **DIRECTION:** South

TIME: 1411 Hours PHOTOGRAPHER: S. Skare

SUBJECT: START collecting drum sample D-01.



SITE: Weltmeyer Acid Spill LOCATION: Harvey, IL SUBJECT: View of tanker T-04.

DATE: October 23, 1997 **DIRECTION:** East

TIME: 1421 Hours PHOTOGRAPHER: S. Skare



SITE: Weltmeyer Acid Spill LOCATION: Harvey, IL

SUBJECT: View of tanker T-03.

DATE: October 23, 1997

DIRECTION: East

TIME: 1422 Hours

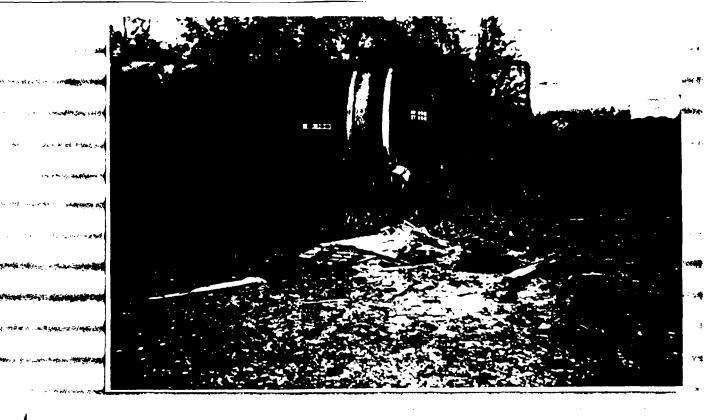
PHOTOGRAPHER: S. Skare



SITE: Weltmeyer Acid Spill LOCATION: Harvey, IL

DATE: October 23, 1997 **DIRECTION:** Northeast SUBJECT: View of tanker T-01; note the "nonhazardous material" label. TIME: 1428 Hours





SITE: Weltmeyer Acid Spill

DATE: October 23, 1997

TIME: 1429 Hours

LOCATION: Harvey, IL

DIRECTION: North

PHOTOGRAPHER: S. Skare

SUBJECT: View of tanker T-01; note the "Licensed Special Waste Hauler" label.



SITE: Weltmeyer Acid Spill LOCATION: Harvey, IL

SUBJECT: View of tanker T-02.

DATE: October 23, 1997 **DIRECTION:** North

TIME: 1430 Hours



SITE: Weltmeyer Acid Spill LOCATION: Harvey, IL

DATE: October 23, 1997 **DIRECTION:** Southwest

SUBJECT: View of the front of Weltmeyer Garage.

TIME: 1431 Hours

PHOTOGRAPHER: S. Skare



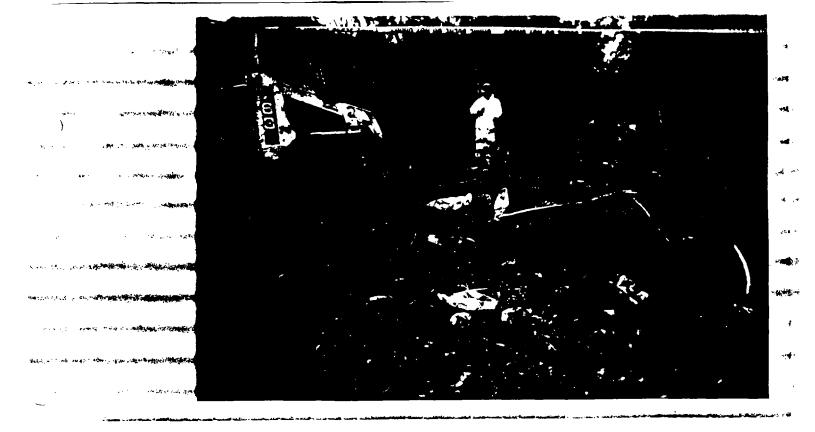
SITE: Weltmeyer Acid Spill

DATE: October 24, 1997 LOCATION: Harvey, IL **DIRECTION:** Southwest

SUBJECT: ERCS loading contaminated soil into rolloff box.

TIME: 1705 Hours





SITE: Weltmeyer Acid Spill LOCATION: Harvey, IL

DATE: October 24, 1997 **DIRECTION:** Southeast

SUBJECT: ERCS using Bobcat to excavate soil from the spill area.

TIME: 1706 Hours

PHOTOGRAPHER: S. Skare



SITE: Weltmeyer Acid Spill

DATE: October 24, 1997 LOCATION: Harvey, IL **DIRECTION:** Southeast

SUBJECT: Open manhole in side of tanker T-03.

TIME: 1720 Hours

Attachment C

Validated Analytical Results



ecology and environment, inc.

International Specialists in the Environment

33 North Dearborn Street Chicago, Illinois 60602

Tel. 312/578-9243, Fax: 312/578-9345

MEMORANDUM

DATE:

November 21, 1997

TO:

Steve Skare, START Project Manager, E & E, Chicago,

Illinois

FROM:

David Hendren, START Analytical Services Manager,

E & E, Chicago, Illinois

THROUGH:

Mary Jane Ripp, START Assistant Program Manager,

E & E, Chicago, Illinois

SUBJECT:

Inorganic Data Quality Review for Resource

Conservation and Recovery Act (RCRA) Metals, Acid

Spill, Harvey, Cook County, Illinois

REFERENCE:

Project TDD S05-9710-010 Analytical TDD S05-9710-807

Project PAN 7C1001SIXX Analytical PAN 7CAG01TAXX

The data quality assurance (QA) review of five drum/tanker samples and two soil samples collected from the Acid Spill site is complete. The samples were collected on October 23, 1997, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). The samples were submitted to NET Laboratories, Bartlett, Illinois. The laboratory analyses were performed according to the United States Environmental Protection Agency (U.S. EPA) Solid Waste 846 Methods 6010 and 7000.

Sample Identification

START	Laboratory
Identification No.	Identification No.
	
T-01	440284
T-03	440385
T-04	440286
S-01	440287
S-02	440288
S-03	440289
D-01	440290

Acid Spill Project TDD S05-9710-010 Analytical TDD S05-9710-807 RCRA Metals Page 2

Data Oualifications:

I. <u>Sample Holding Time: Acceptable</u>

The samples were collected on October 23, 1997, and analyzed on October 30 and 31, 1997. Analysis for mercury was performed on October 30, 1997. This is within the 6-month (28 days for mercury) holding time limit.

II. <u>Calibration</u>:

• <u>Initial Calibration: Acceptable</u>

Recoveries for the initial calibration verification were within 90 to 110% (80 to 120% for mercury), as required. The correlation coefficient for mercury exceeded 0.995.

• Continuing Calibration: Acceptable

All analytes included in the continuing calibration verification standard were within 90 to 110% (80 to 120% for mercury), as required.

III. Blanks: Acceptable

Calibration and preparation blanks were analyzed with each analytical batch. No target analytes were detected in the blanks.

IV. Overall Assessment of Data For Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in the Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01 (April 1990) Data Validation Procedures, Section 3.0, Metallic Inorganic Parameters. Based upon the information provided, the data are acceptable for use.



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International Specialists in the Environment

33 North Dearborn Street Chicago, Illinois 60602

Tel. 312/578-9243, Fax: 312/578-9345

MEMORANDUM

DATE:

November 21, 1997

TO:

Steve Skare, START Project Manager, E & E, Chicago,

Illinois

FROM:

David Hendren, START Analytical Services Manager,

E & E, Chicago, Illinois

THROUGH:

Mary Jane Ripp, START Assistant Program Manager,

E & E, Chicago, Illinois

SUBJECT:

Organic Data Quality Review for Volatile Organic Compounds (VOCs), Acid Spill, Harvey, Cook County,

Illinois

REFERENCE:

Project TDD S05-9710-010 Analytical TDD S05-9710-807

Project PAN 7C1001SIXX

Analytical PAN 7CAG01TAXX

The data quality assurance (QA) review of one drum sample collected from the Acid Spill site is complete. The sample was collected on October 23, 1997, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). The sample was submitted to NET Laboratories, Bartlett, Illinois. The laboratory analysis was performed according to the United States Environmental Protection Agency (U.S. EPA) Solid Waste 846 Method 8260.

Sample Identification

START Identification No.

Laboratory Identification No.

D-01

440290

Data Oualifications:

I. Sample Holding Time: Acceptable

The samples were collected on October 23, 1997, and analyzed on October 27, 1997. This is within the 14-day holding time limit.

Acid Spill Project TDD S05-9710-010 Analytical TDD S05-9710-807 VOCs Page 2

II. <u>Gas Chromatography/Mass Spectrometry (GC/MS) Tuning:</u> <u>Acceptable</u>

GC/MS tuning to meet ion abundance criteria using bromofluorobenzene (BFB) were acceptable and sample was analyzed within 12 hours of BFB tuning.

III. Calibrations:

• Initial Calibration: Qualified

A five-point initial calibration was performed prior to analysis. All average response factors were greater than 0.05 except methyl ethyl ketone; therefore, the nondetect value for this compound has been flagged "R", as required. The percent relative standard deviations (%RSDs) between response factors were less than 30% for all detected target compounds.

• Continuing Calibration: Acceptable

The percent differences of the response factors were less than 25%, as required for detected target compounds.

IV. Blank: Acceptable

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A method blank was analyzed with the sample. No target compounds or contaminants were detected in the blank.

V. <u>Internal Standards: Acceptable</u>

The areas of the internal standards in the sample were within -50% to +100% of the associated calibration check standard. The retention times of the internal standards were within the 30-second control limit.

VI. <u>Compound Identification: Acceptable</u>

The mass spectra and retention times of the detected compounds matched those of the standards.

VII. Additional QC Checks: Acceptable

The recoveries of the surrogates used in the sample and blank were within laboratory-established guidelines.

Acid Spill
Project TDD S05-9710-010
Analytical TDD S05-9710-807
VOCs
Page 3

VIII. Overall Assessment of Data for Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in the Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01 (April 1990), Data Validation Procedures, Section 5.0, VOAs By GC/MS analysis. Based upon the information provided, the data are acceptable for use, with the above-stated qualifications.

Data Qualifiers and Definitions:

R - The sample results are rejected (analyte may or may not be present) due to gross deficiencies in quality control criteria. Any reported value is unusable. Resampling and/or reanalysis is necessary for verification.



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International Specialists in the Environment

33 North Dearborn Street Chicago, Illinois 60602 Tel. 312/578-9243, Fax: 312/578-9345

MEMORANDUM

DATE:

November 21, 1997

TO:

Steve Skare, START Project Manager, E & E, Chicago,

Illinois

FROM:

David Hendren, START Analytical Services Manager,

E & E, Chicago, Illinois

THROUGH:

Mary Jane Ripp, START Assistant Program Manager,

E & E, Chicago, Illinois

SUBJECT:

Data Quality Review for Flash Point and pH, Acid

Spill, Harvey, Cook County, Illinois

REFERENCE:

Project TDD S05-9710-010 Analytical TDD S05-9710-807

Project PAN 7C1001SIXX Analytical PAN 7CAG01TAXX

The data quality assurance (QA) review of five tanker/drum samples and two soil samples collected from the Acid Spill site is complete. The samples were collected on October 23, 1997, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). The samples were submitted to NET Laboratories, Bartlett, Illinois. The laboratory analyses were performed according to the United States Environmental Protection Agency (U.S. EPA) Solid Waste 846 Methods 1010 and 9045. (Analysis of flash point was performed only on D-01.)

Sample Identification

START	Laboratory
Identification No.	Identification No.
T-01	440384
T-03	440385
T-04	440286
S-01	440287
S-02	440288
S-03	440289
D-01	440290

Acid Spill Project TDD S05-9710-010 Analytical TDD S05-9710-807 Flash Point, pH Page 2

Data Qualifications:

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I. <u>Sample Holding Time: Acceptable</u>

The samples were collected on October 23, 1997, and analyzed on October 29, 1997. The Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01 (April 1990) does not specify holding times for these parameters.

II. <u>Calibrations: Acceptable</u>

The calibrations for flash point and pH were verified before sample analyses. The calibration for flash point was verified using xylene and the calibration for pH was verified following analyses of three standard solutions.

III. Overall Assessment of Data for Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in OSWER Data Validation Procedures, Section 9.0, Generic Data Validation Procedures. Based upon the information provided, the data are acceptable for use.



Tel: (630) 289-3100 Fax: (630) 289-5445 Rockford Division 3548 35th Street Rockford, IL 61109

Tel: (815) 874-2171 Fax: (815) 874-5622 (800) 807-2877

ANALYTICAL REPORT

Mr. Dave Hendren ECOLOGY & ENVIRONMENT, INC 33 N. Dearborn

Suite 900

Chicago, IL 60602

11/01/1997

Sample No. : 440284

NET Job No.: 97.12764

Sample Description:

Tanker #1; T-01

Analytical; S05-9710-807

Date Taken: 10/23/1997 Time Taken: 12:15 IEPA Cert. No. 100221 Date Received: 10/24/1997

Time Received: 15:20 WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch N Prep/Ru	-
pH, Non-Aqueous	1.65	units	10/29/1997	0.10	ttl	26	9045B (1)
Arsenic, GFAA	<0.50	ug/g	10/31/1997	0.50	mhp	62 41	3 7060 (1)
Barium, ICP	<1.0	ug/g	10/30/1997	1.0	jtt	875 15	71 6010 (1)
Cadmium, ICP	3.8	ug/g	10/30/1997	0.50	jtt	875 15	56 6010 (1)
Chromium, ICP	21	ug/g	10/30/1997	2.0	jtt	875 15	38 6010 (1)
Lead, ICP	<4.0	ug/g	10/30/1997	4.0	jtt	875 17	64 6010 (1)
Mercury, CVAA	<0.040	ug/g	10/30/1997	0.040	sep	547 65	7 7 471A (9)
Selenium, GFAA	<0.25	ug/g	10/31/1997	0.25	mhp	62 34	8 7740 (1)
Silver, AA	<2.0 MX	ug/g	10/31/1997	2.0	sep	363 46	5 7760 (1)

 $\ensuremath{\mathsf{MX}}$: Dilution required due to sample matrix; analyte is not detected.

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ANALYTICAL REPORT

Mr. Dave Hendren

ECOLOGY & ENVIRONMENT, INC

33 N. Dearborn

Suite 900

Chicago, IL 60602

11/01/1997

Sample No. : 4

440285

NET Job No.:

97.12764

Sample Description:

Tanker #3; T-03

Analytical; S05-9710-807

Date Taken: 10/23/1997

Time Taken: 12:40 IEPA Cert. No. 100221

Date Received: 10/24/1997

Time Received: 15:20 WDNR Cert. No. 999447130

Parameter	Results		Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run	Analytical Method
pH, Non-Aqueous	1.83		units	10/29/1997	0.10	ttl	26	9045B (1)
Arsenic, GFAA	<0.50		ug/g	10/30/1997	0.50	whp	62 413	7060 (1)
Barium, ICP	<1.0		ug/g	10/30/1997	1.0	jtt	875 1571	6010 (1)
Cadmium, ICP	3.8		ug/g	10/30/1997	0.50	jtt	875 1556	6010 (1)
Chromium, ICP	13		ug/g	10/30/1997	2.0	jtt	875 1538	6010 (1)
Lead, ICP	8.8		ug/g	10/30/1997	4.0	jtt	875 1764	6010 (1)
Mercury, CVAA	<0.040		ug/g	10/30/1997	0.040	sep	547 657	7471A (9)
Selenium, GFAA	<0.25		ug/g	10/30/1997	0.25	mhp	62 348	7740 (1)
Silver, AA	<2.0	MX	ug/g	10/30/1997	2.0	зер	363 464	7760 (1)



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ANALYTICAL REPORT

Mr. Dave Hendren

ECOLOGY & ENVIRONMENT, INC

33 N. Dearborn

Suite 900

Chicago, IL 60602

11/01/1997

Sample No. :

440286

NET Job No.:

97.12764

Sample Description:

Tanker #4; T-04

Analytical; S05-9710-807

Date Taken: 10/23/1997 Time Taken: 12:50

IEPA Cert. No. 100221

Date Received: 10/24/1997

Time Received: 15:20 WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch Prep/F		Analytical Method
pH, Non-Aqueous	1.72	units	10/29/1997	0.10	tt1	2	26	90 45B (1)
Arsenic, GFAA	<0.50	ug/g	10/30/1997	0.50	mhp	62 4	113	7060 (1)
Barium, ICP	<1.0	ug/g	10/30/1997	1.0	jtt	875	1571	6010 (1)
Cadmium, ICP	6.6	ug/g	10/30/1997	0.50	jtt	875 1	1556	6010 (1)
Chromium, ICP	19	ug/g	10/30/1997	2.0	jtt	875	1538	6010 (1)
Lead, ICP	<4.0	ug/g	10/30/1997	4.0	jtt	875 1	1764	6010 (1)
Mercury, CVAA	<0.040	ug/g	10/30/1997	0.040	sep	547	557	7471A (9)
Selenium, GFAA	<0.25	ug/g	10/30/1997	0.25	mhp	62 3	348	7740 (1)
Silver, AA	<2.0	MX ug/g	10/30/1997	2.0	sep	363 4	64	7760 (1)

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ANALYTICAL REPORT

Mr. Dave Hendren ECOLOGY & ENVIRONMENT, INC

33 N. Dearborn Suite 900

Chicago, IL 60602

11/01/1997

Sample No. : 440287

NET Job No.: 97.12764

Sample Description:

Soil East of Tanker #3; S-01

Analytical; S05-9710-807

Date Taken: 10/23/1997 Time Taken: 13:15 IEPA Cert. No. 100221 Date Received: 10/24/1997

Time Received: 15:20 WDNR Cert. No. 999447130

	Parameter	Results		Units	Date of Analysis	Method PQL	<u>Ā</u> nalyst	Batch Prep		Analytic Method	
	pH, Non-Aqueous	3.96		units	10/29/1997	0.10	ttl		26	90 45B (3	1)
	Arsenic, GFAA	4.6	M+	ug/g	10/30/1997	0.50	mhp	62	413	7060 (1))
	Barium, ICP	68		ug/g	10/30/1997	1.0	jtt	875	1571	6010 (1))
	Cadmium, ICP	3.4		ug/g	10/30/1997	0.50	jtt	875	1556	6010 (1))
/	Chromium, ICP	28		ug/g	10/30/1997	2.0	jtt	875	1538	6010 (1))
	Lead, ICP	64		ug/g	10/30/1997	4.0	jtt	875	1764	6010 (1))
	Mercury, CVAA	0.054		ug/g	10/30/1997	0.040	sep	547	657	7471A (9)
	Selenium, GFAA	0.65	M+	ug/g	10/30/1997	0.25	whp	62	348	7740 (1))
	Silver, AA	<2.0		ug/g	10/30/1997	2.0	sep	363	464	7760 (1)



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ANALYTICAL REPORT

Mr. Dave Hendren ECOLOGY & ENVIRONMENT, INC 33 N. Dearborn Suite 900 Chicago, IL 60602

11/01/1997

Sample No. : 440288

NET Job No.: 97.12764

Sample Description:

Bag Inside E. Garage; S-02
Analytical; S05-9710-807

Date Taken: 10/23/1997 Time Taken: 13:25 IEPA Cert. No. 100221

Date Received: 10/24/1997

Time Received: 15:20 WDNR Cert. No. 999447130

Para	ameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch Prep/R		Analytical Method
pH, Non-Aqueou	19	2.99	units	10/29/1997	0.10	ttl	2	26	90 45B (1)
Arsenic, GFAA		<0.50	ug/g	10/30/1997	0.50	adm	62 4	113	7060 (1)
Barium, ICP		1.7	ug/g	10/30/1997	1.0	jtt	875 1	.571	6010 (1)
Cadmium, ICP		8.1	ug/g	10/30/1997	0.50	jtt	875 1	1556	6010 (1)
Chromium, ICP		<2.0	ug/g	10/31/1997	2.0	kdw	875 1	539	6010 (1)
Lead, ICP		48	ug/g	10/30/1997	4.0	jtt	875 1	764	6010 (1)
Mercury, CVAA		<0.040	ug/g	10/30/1997	0.040	sep	547 6	57	7471A (9)
Selenium, GFAA	١	<0.25	ug/g	10/30/1997	0.25	qdm	62 3	348	7740 (1)
Silver, AA		<2.0	ug/g	10/30/1997	2.0	зер	363 4	64	7760 (1)



Tel: (630) 289-3100 Fax: (630) 289-5445 Rockford Division 3548 35th Street Rockford, IL 61109 Tel: (815) 874-2171 Fax: (815) 874-5622

(800) 807-2877

ANALYTICAL REPORT

Mr. Dave Hendren ECOLOGY & ENVIRONMENT, INC

33 N. Dearborn Suite 900

Chicago, IL 60602

11/01/1997

Sample No. : 440289

NET Job No.: 97.12764

Sample Description: Drum Inside W. Garage; S-03

Analytical; S05-9710-807

Date Taken: 10/23/1997

Time Taken: 13:50 IEPA Cert. No. 100221

Date Received: 10/24/1997

Time Received: 15:20 WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run	Analytical Method
pH, Non-Aqueous	2.25	units	10/29/1997	0.10	ttl	26	90 45B (1)
Arsenic, GFAA	<0.50	ug/g	10/30/1997	0.50	mhp	62 413	7060 (1)
Barium, ICP	5.2	ug/g	10/30/1997	1.0	jtt	875 1571	6010 (1)
Cadmium, ICP	0.56	ug/g	10/30/1997	0.50	jtt	875 1556	6010 (1)
Chromium, ICP	3.4	ug/g	10/31/1997	2.0	kdw	875 1539	6010 (1)
Lead, ICP	20	ug/g	10/30/1997	4.0	jtt	875 1764	6010 (1)
Mercury, CVAA	<0.040	ug/g	10/30/1997	0.040	зер	547 657	7 471A (9)
Selenium, GFAA	<0.25	ug/g	10/30/1997	0.25	mhp	62 348	7740 (1)
Silver, AA	<2.0	ug/g	10/30/1997	2.0	зер	363 464	7760 (1)



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ANALYTICAL REPORT

Mr. Dave Hendren ECOLOGY & ENVIRONMENT, INC 33 N. Dearborn

Suite 900

Chicago, IL 60602

11/01/1997

Sample No. : 440290

97.12764 NET Job No.:

Sample Description: Drum Inside W. Garage; D-01

Analytical; S05-9710-807

Date Taken: 10/23/1997 Time Taken: 14:10 IEPA Cert. No. 100221

10/24/1997 Date Received:

Time Received: 15:20 WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst		h No. /Run ·	Analytical Method
pH, Non-Aqueous	5.22	units	10/29/1997	0.10	ttl		26	90 45B (1)
Arsenic, GFAA	<0.50	ug/g	10/30/1997	0.50	mhp	62	413	7060 (1)
Barium, ICP	<1.0	ug/g	10/30/1997	1.0	jtt	875	1571	6010 (1)
Cadmium, ICP	<0.50	ug/g	10/30/1997	0.50	jtt	875	1556	6010 (1)
Chromium, ICP	<2.0	ug/g	10/30/1997	2.0	jtt	875	1538	6010 (1)
Lead, ICP	<4.0	ug/g	10/30/1997	4.0	jtt	875	1764	6010 (1)
Mercury, CVAA	<0.040	ug/g	10/30/1997	0.040	sep	547	657	7471A (9)
Selenium, GFAA	<0.25	ug/g	10/30/1997	0.25	mhp	62	348	7740 (1)
Silver, AA	<2.0 MX	ug/g	10/30/1997	2.0	sep	363	464	7760 (1)
VOLATILES - 8260 NonAqueous								
Acetone	<23,000	ug/Kg	10/27/1997	100	11j		258	8260A (9)
Acrylonitrile	<12,000	ug/Kg	10/27/1997	50	11j		258	8260A (9)
Benzene	<1,200	ug/Kg	10/27/1997	5.0	11j		25 P	8260A (9)
Bromobenzene	<1,200	ug/Kg	10/27/1997	5.0	11j		258	8260A (9)
Bromochloromethane	<1,200	ug/Kg	10/27/1997	5.0	11j		258	8260A (9)
Bromodichloromethane	<1,200	ug/Kg	10/27/1997	5.0	11j		258	8260A (9)
Bromoform	<1,200	ug/Kg	10/27/1997	5.0	11j		258	8260A (9)
Bromomethane	<1,200	ug/Kg	10/27/1997	5.0	11j		258	8260A (9)
n-Butylbenzene	<1,200	ug/Kg	10/27/1997	5.0	11 j		258	8260A (9)
sec-Butylbenzene	<1,200	ug/Kg	10/27/1997	5.0	11j		258	8260A (9)
tert-Butylbenzene	<1,200	ug/Kg	10/27/1997	5.0	11j		258	8260A (9)
Carbon tetrachloride	<1,200	ug/Kg	10/27/1997	5.0	11j		258	8260A (9)
Chlorobenzene	<1,200	ug/Kg	10/27/1997	5.0	11j		258	8260A (9)
Chlorodibromomethane	<1,200	ug/Kg	10/27/1997	5.0	11j		258	8260A (9)
Chloroethane	<1,200	ug/Kg	10/27/1997	5.0	11j		258	8260A (9)
Chloroform	<1,200	ug/Kg	10/27/1997	5.0	11j		258	8260A (9)

VOC analysis performed at a 230x dilution due to sample matrix.

⁾ MX : Dilution required due to sample matrix; analyte is not detected.



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Rockford Division 3548 35th Street Rockford, IL 61109

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ANALYTICAL REPORT

Mr. Dave Hendren ECOLOGY & ENVIRONMENT, INC 33 N. Dearborn Suite 900 Chicago, IL 60602

11/01/1997

Sample No. : 440290

NET Job No.: 97.12764

Sample Description: Drum Inside W. Garage; D-01

Analytical; S05-9710-807

Date Received: 10/24/1997 Date Taken: 10/23/1997 Time Taken: Time Received: 15:20 14:10 WDNR Cert. No. 999447130 IEPA Cert. No. 100221

Parameter	Results	Units	Date of	Method	Analyst	Batch No.	Analytical	
			Analysis	PQL		Prep/Run	Method	
Chloromethane	<1,200	ug/Kg	10/27/1997	5.0	11 j	258	8260A (9)	
2-Chlorotoluene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)	
4-Chlorotoluene	<1.200	ug/Kg	10/27/1997	5.0	111	258	8260A (9)	
1,2-Dibromo-3-chloropropane	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)	
1,2-Dibromoethane (EDB)	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)	
Dibromomethane	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)	
1,2-Dichlorobenzene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)	
1,3-Dichlorobenzene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)	
1,4-Dichlorobenzene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)	
Dichlorodifluoromethane	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)	
1,1-Dichloroethane	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)	
1,2-Dichloroethane	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)	
1,1-Dichloroethene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)	
cis-1,2-Dichloroethene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)	
trans-1,2-Dichloroethene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)	
1,2-Dichloropropane	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)	
1,3-Dichloropropane	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)	
2,2-Dichloropropane	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)	
1,1-Dichloropropene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)	
cis-1,3-Dichloropropene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)	
trans-1,3-Dichloropropene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)	
Ethylbenzene	1,200	ug/Kg	10/27/1997	5.0	11 j	258	8260A (9)	
2-Hexanone	<23,000	ug/Kg	10/27/1997	100	11j	258	8260A (9)	
Hexachlorobutadiene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)	
Iodomethane	<1,200	ug/Kg	10/27/1997	5.0	11 j	258	8260A (9)	
Isopropylbenzene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)	
p-Isopropyltoluene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)	

VOC analysis performed at a 230x dilution due to sample matrix.



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ANALYTICAL REPORT

Mr. Dave Hendren ECOLOGY & ENVIRONMENT, INC 33 N. Dearborn Suite 900 Chicago, IL 60602

11/01/1997

Sample No. : 440290

NET Job No.: 97.12764

Sample Description:

Drum Inside W. Garage; D-01 Analytical; S05-9710-807

Date Taken: 10/23/1997 Time Taken: 14:10

IEPA Cert. No. 100221

Date Received: 10/24/1997

Time Received: 15:20 WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis			Batch No. Prep/Run	Analytical Method
Methyl Ethyl Ketone	<23,000	ug/Kg	10/27/1997	100	11j	258	8260A (9)
Methyl Isobutyl Ketone	<23,000	ug/Kg	10/27/1997	100	11j	258	8260A (9)
Methylene Chloride	<12,000	ug/Kg	10/27/1997	50	11j	258	8260 A (9)
Methyl-tert-butyl ether	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
Napthalene	110,000	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
n-propylbenzene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
Styrene	<1,200	ug/Kg	10/27/1997	5.0	11 j	258	8260A (9)
1,1,1,2-Tetrachloroethane	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
1,1,2,2-Tetrachloroethane	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
Tetrachloroethene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
Toluene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
1,2,3-Trichlorobenzene	<1,200	ug/Kg	10/27/1997	5.0	llj	258	8260A (9)
1,2,4-Trichlorobenzene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
1,1,1-Trichloroethane	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
1,1,2-Trichloroethane	<1,200	ug/Kg	10, 27/1997	5.0	11j	258	8260A (9)
Trichloroethene	<1,200	ug/Kg	10 27/1997	5.0	11j	258	8260A (9)
Trichlofluoromethane	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
1,2,3-Trichloropropane	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
1,2,4-Trimethylbenzene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
1,3,5-Trimethylbenzene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
Vinyl chloride	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
Xylenes	7,000	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
Surr: Dibromofluoromethane	104.6	*	10/27/1997	80-120	11j	258	8260A (9)
Surr: Toluene-d8	86.2	*	10/27/1997	81-117	11j	258	8260A (9)
Surr: 4-Bromofluorobenzene	98.6	*	10/27/1997	74-121	11j	258	8260A (9)
Ignitability (Flash Point)	>212	deg F	10/29/1997	>212	jrs	659	1010 (1)

VOC analysis performed at a 230x dilution due to sample matrix.

Attachment D

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Waste Disposal Table

Table 1

WASTE DISPOSAL TABLE ACID SPILL SITE a.k.a. WELTMEYER ACID SPILL SITE HARVEY, COOK COUNTY, ILLINOIS

Wastestream	Medium	Quantity	Treatment	Disposal
Hazardous waste liquid	Acid from tankers	12,000 gallons	Neutralization	Heritage Environmental, Indianapolis, Indiana
Nonhazardous waste solid	Drums of grease	55 gallons	NA	Heritage Environmental, Lemont, Illinois
Hazardous waste liquid	Drums of paint	110 gallons	NA	Heritage Environmental, Lemont, Illinois
Hazardous waste liquid/solid	Aerosols and small containers	2 lab packs	NA	Heritage Environmental, Lemont, Illinois
Nonhazardous waste solid	Soil	10 cubic yards	Landfill	Heritage Environmental, Indianapolis, Indiana
Hazardous waste Solid	Bags of sulfamic acid	4 cubic yards	NA	Heritage Environmental, Lemont, Illinois
Hazardous waste solid	Metal from tankers	60 cubic yards	Landfill	NA

Kev:

 \overline{NA} = No information available.

Source: Ecology and Environment, Inc., 1998.